REMARKS/ARGUMENTS

The present communication is filed in response to the Official Action mailed March 27, 2006, finally rejecting all the claims presently pending in the application ("Final Rejection".) Of the pending claims, claims 1, 7 and 13 are independent claims. All the other claims remaining in the application, namely claims 4-6, 10-12 and 14-23, depend from one of the independent claims.

A one-month extension of the time to respond, up to and including July 27, 2006 is filed concurrently herewith.

Although the claims have not been amended in the present reply, applicants have provided a listing of the claims for the Examiner's convenience as indicated above.

In the Final Rejection, the Examiner rejected all the claims pending in the application under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Nos. 5,892,508 to Howe et al. ("Howe"), 5,978,855 to Metz et al. ("Metz"), The IEEE Standard for a High Performance Serial Bus ("1394 reference"), U.S. Patent Application 2002/0012530 A1 to Bruls ("Bruls"), and U.S. Patent 6,212,632 to Surine et al. ("Surine").

In particular, in rejecting claims 1, 7 and 13, the Examiner acknowledges that the combination of Howe and Metz fail to disclose (1) a memory; and (2) a processing unit as claimed. Specifically, with respect to claim 1, the Examiner states:

> "The combination of Howe and Metz fails to disclose a memory for storing said received transport stream data and containing a pre-stored bit-rate value that indicates the bit-rate of the transport stream before receipt of the transport stream and corresponding to a source of origin of the broadcast, a processing unit which reads the prestored bit rate value and determines an optimal buffer size in accordance with a bit rate of said received transport stream data, and reserves in memory in response to a

> power on signal in the receiver, a storage
> area having a optimal buffer size."

(Final Rejection at 4.)

The Examiner then asserts that the 1394 reference, *Bruls* and *Surine* makes up for the two deficiencies of *Howe* and *Metz*. To be clear, with reference to claim 1, these deficiencies are that *Howe* and *Metz* do not disclose any of the features of the memory and processing unit limitation of claim 1. In each of the subsections below, applicants address the Examiner's contentions with regard to how the remaining references make up for these deficiencies in *Howe* and *Metz*.

Howe, Metz and The 1394 Reference

It is unclear to applicants exactly why the Examiner is relying on the 1394 reference. In particular, the Examiner asserts that "The 1394 reference discloses, that in response to a power on signal, a receiver receives information regarding the bandwidth (bitrate) of the transport stream data to be transmitted as well as the source of the data during a handshake operation, this bandwidth is then utilized for the transmission of data (pages 19-20, 209-227, 241-242 and 343-351) in order to ensure that data is routed properly to the correct device at the correct bandwidth." (*Id.* at 4.) It is unclear to applicants how these teachings and advantages of the 1394 reference are relevant to the acknowledged deficiencies of *Howe* and *Metz*.

Further, the Examiner admits that the combination of *Howe*, *Metz* and the 1394 reference "fails to disclose a memory for storing said received transport stream data" and a processing unit as is recited in claim 1. (*Id.* at 4.) In that regard, the Examiner relies on *Bruls* and *Surine* to make up for those deficiencies in the combination of *Howe*, and *Metz*. Thus, applicants are puzzled as to the exact teaching in the 1394

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reference that the Examiner believes is relevant to the claimed features of claims 1, 7 and 13.

In particular, the Examiner concludes that it would have been obvious to one skilled in the art at the time of invention to modify the combination of Howe and Metz "to utilize the power on features, bit rate storage and source of origin features as taught by the 1394 reference, **for the advantage of ensuring that the data is routed properly to the correct device at the correct bandwidth.**" (*Id.* at 4 (Emphasis Added).) This advantage, however, is not relevant to the claimed invention.

Specifically, each of the independent claim are concerned with the advantage of "reserving, in the memory, a storage area having the ultimate buffer size," as is recited, for example, in claims 7 and 13. That advantage, however, is completely distinct from the advantageous of the 1394 reference as acknowledge by the Examiner. Thus, there is no motivation to combine the 1394 reference with *Howe* and *Metz*. Furthermore, even if these references are combined, the deficiencies of *Howe* and *Metz* still exist. Thus, applicants do not understand the relevance of the 1394 reference with regard to the claims of the present application.

In addition, applicants respectfully submit that not only does the 1394 reference not teach "a memory for storing said received transport stream data," as is recited in claim 1, but it also does not teach any of the remaining portion of this limitation as is recited in claim 1 or claims 7 or 13.

Howe, Metz, the 1394 Reference and Bruls

The Examiner relies on *Bruls* to make up for the deficiencies in the combination of *Howe*, *Metz* and the 1394 reference. In this regard, the Examiner notes that "The combination of Howe, Metz and 1394 fails to disclose a memory for storing said received transport stream data, a processing

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unit which reads the prestored bit rate value and determines an optimal buffer size in accordance with a bit rate of said received transport stream data, and reserves in memory in response to a power on signal in the receiver, a storage area having a optimal buffer size." (*Id.* at 4-5.)

Bruls is generally directed to a device that receives a signal on input 21, such as a signal for a video or audio program, and compresses the signal into an output signal available at output 23. (*Bruls*, [0022].) The output signal may then be recorded "a disc-shaped an information carrier 1 of a rewritable type such as, for example, a CD-E (Compact Disc Erasable)". (*Id. at* [0021].)

Bruls' device includes a compression unit 22 and a controller 25. (*Id.*) The controller 25 "is coupled to the control input 26 of the compression unit 22 and sets the compression unit to a desired bit rate through this control input." (*Id.*) The controller 25 receives as input, information relating to the duration of the program and the space available for storing the program and uses this input information to calculate a desired bit rate. (*Id.*) The time information is disclosed as the start and end time of the program and inputted by a user as acknowledged by the Examiner. (Final Rejection at 5.) Upon receipt of this information, the controller calculates the space available and the bit rate, to wit:

> "The system controller calculates from this information the data space available for the encoded signal and sets the bit rate via the control input 26 so that the program is expected to fill the available data space completely. For example, the available data space is divided by the required duration, which duration is derived from the time information presented through the time input. This results in a bit rate (bits per second) at which the available data space

> will be completely filled with a program to
> be encoded."

(*Bruls*, [0022].) By controlling the bit rate on output 23, *Bruls'* device ensures that the program is recorded in the available data space while maintaining the quality of the program. (*Id.*, [0005], [0010], [0023].) Thus, *Bruls* explains that by taking into account the average output bit rate that actually occurred previously as part of the encoding process, the amount of space required and quality of picture may be correlated thereto. (*Id.* [0026].)

In relying on *Bruls*, the Examiner states that "additionally the bit rate **may be** a prestored value based on the average bit rate of incoming transport stream signals over time, (paragraphs [0022], [0026] and [0028]) thus maximizing the available buffer space by utilizing a bit rate as appropriate for the content signal." (Final Rejection at 5.) "To establish *prima facie* obviousness of claimed invention, all the claim limitation must be taught or suggested by the prior art." (M.P.E.P. §2143.03, p. 2100-133.) Therefore, applicants respectfully submit that even if the *Bruls* reference disclose that "the bit rate **may be** a prestored value," "may be" or mere possibilities is not legally sufficient to establish or teaching. In fact, mere possibilities are not sufficient to establish inherency nor do they suggest the teaching which they may be cited for. Furthermore, applicants respectfully submit that *Bruls* does not teach prestoring an incoming bit rate value.

In particular, *Bruls* only talks about one bit rate. That bit rate is the bit rate that results from the encoding process. That bit rate is the outgoing bit rate of the data as it is being encoded onto the read writable CD. (*Id.* [0023].) Furthermore, *Bruls* discloses one memory 37. (*Id.* [0024]) That memory is disclosed as a picture memory. (*Id.*) There is no other memory disclosed in *Bruls* and the one memory that is

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disclosed is not disclosed as prestoring a bit rate value. Thus, *Bruls* does not teach or suggests prestoring a bit rate value associated with an incoming bit rate or data stream. Indeed, the only bit rate discussed in *Bruls* is the outgoing bit rate calculated by the conversion unit 22.

In sum, *Bruls* does not support the Examiner's rejection. Therefore, for at least this reason, the Examiner has not established a *prima facie* case of obviousness.

Howe, Metz, the 1394 Reference, Bruls and Surine

The Examiner relies on *Surine* to makeup for the deficiencies in *Howe*, *Metz*, the 1394 reference and *Bruls*. In that regard, the Examiner acknowledges that those references fail to "disclose performing the buffer size determination after a power on signal is issued." (Final Rejection 5.)

Applicants respectfully traverse the Examiner's assertion that it would have been obvious to combine *Surine* with the other references so as to render the claims of the present application obvious. In particular, *Surine* manages memory by decompressing the most frequently used software or functions 416 stored in ROM 310, loading the decompressed software into unoccupied portions of RAM 315 and running the decompressed software from the unoccupied portions. (*Surine*, col. 5, ll. 24-30.) *Surine* states that "the size of the RAM 315 is minimized by running the majority of the software of embedded system 300 (*e.g.*, boot code 401 and operating system code 403) from ROM 310 . . . [and] running the most frequently-used software . . . from RAM 315." (*Id.*) Thus, *Surine* when confronted with the problem of reducing "the amount of expensive RAM needed in the embedded system of a device" (*Id.*, col. 2, ll. 37-40) uses one memory (ROM) to minimize the size of another memory (RAM).

Furthermore, *Surine* teaches using a RAM 315 having a

fixed "capacity of approximately 4MB."   (*Surine*, col. 4, l. 65 to col. 5, l. 1.)   At boot-up, write address space is reserved in the RAM 315.   (*Id.*, col. 5, ll.42-45.)   The write address space includes capture buffer 414, display buffer 415, and working memory 420.   (*Id.*) The size of the write address space is not taught or suggested as changing in response to any condition.   The size of the write address space must therefore be presumed to be fixed.   Therefore, the portion of the RAM 315 that is used to run uncompressed function 416 is also fixed. (*Id.*, col. 5, l. 65 to col. 6, l. 2.)

Bruls, on the other hand, teaches a method and device for encoding a program so that the program fits in the available data space.   "For this purpose, a recording device according to the invention comprises a compression unit (22) whose bit rate is influenced by a system controller (45) via a control input (26) during the encoding process in dependence on the remaining part of the vacant data space on the information carrier (1) and the remaining duration of the program." (*Bruls*, Abstract.)

Thus, *Bruls* and *Surine* include no motivation that would lead one of ordinary skill in the art to combine these references as the Examiner has done.   In particular, each of these references, as acknowledged by the Examiner, are directed to the entirely different objectives and intended to solve entirely different problems.   Moreover, even if *Bruls* did disclose prestoring an incoming bit rate value as asserted by the Examiner, there is no motivation to use such a bit rate value in *Surine*, because *Bruls* is only concerned with recording data on a CD.   On the other hand, *Bruls* includes no motivation or suggestion for combining his encoding process to boot up or power on conditions as disclosed by *Surine*.   Furthermore, applicants respectfully submit that, on the other hand, *Surine* is not at all concerned with setting optimal buffer values.

In order for the Examiner to establish a *prima facie*

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case of obviousness, each and every limitation of the claimed invention must be disclosed by the references.   In addition, there must be some motivation or suggestion in the references themselves to combine the references to obtain the claimed invention.   In addition to the foregoing deficiencies identified above, applicants respectfully submit that there is no motivation or suggestion to combine the references in the manner that the Examiner has done.

The Examiner has parsed the claim language into so many different sections and applied each section to a different reference so as to use the claims as a road map for the rejection.   The Examiner is able to reach the claimed combination only after having the opportunity to review applicants' claims and disclosure.   It is impermissible for the Examiner to use the claimed invention as a template to piece together the teachings of the prior art.   *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992).

Applicants therefor respectfully submit that the claimed combination of claims 1, 7 and 13 are not rendered obvious by the references of record for at least the foregoing reasons.

In particular, the references do not teach or suggests "a memory for storing said received transport stream data and containing a pre-stored bit-rate value that indicates the bit-rate of said transport stream data before receipt of said transport stream by said receiving unit and corresponds to a source of origin of the broadcast [and] a processing unit which reads said pre-stored bit rate value from said memory and determines an optimal buffer size in accordance with said bit-rate value and which reserves, in said memory, a storage area having said optimal buffer size in response to a power-on signal in said broadcast receiver," as is recited in claim 1.

In addition, the references do not or suggest "determining an optimal buffer size in the memory in accordance with the bit-rate value retrieved from the memory and in response to a power-on signal generated by the broadcast receiver; reserving, in the memory, a storage area having the optimal buffer size; storing the received transport stream data in the reserved storage area; and using the reserved storage area to separate the desired transport packet from the stored transport stream data," as is recited in claim 7.

In addition, the references do not teach or suggest the claimed combination of claim 13.

As all the other claims depending in the application depend from either claim 1, 7 or 13, applicants respectfully submit that these claims are also not rendered obvious by the references relied on by the Examiner for at least the foregoing reasons.

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In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: July 27, 2006   Respectfully submitted,

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